

Strain	Systolic blood pressure (mmHg)
C57BL/6J (Wild-type)	109.1 ± 2.4
hRN	106.6 ± 3.1
hAG	110.4 ± 3.9
(hRN × hAg)F1	132.2 ± 8.9*

Data are mean ± s.e.m.

* $P < 0.001$ compared to other 3 strains

Systolic blood pressure (SBP) of hRN, hAG, and (hRN × hAG)F1 mice was evaluated using tail-cuff method. 9 to 15 weeks-old mice were tested from 5 to 10 times in a daily 15 min measurement. The same time of day (9 to 12 a.m.) was chosen in order to avoid variation. The average of consecutive 4-day measurement is shown in the list. Blood pressure in double-Tg mice ((hRN × hAG)F1) was significantly higher than those in hRN and hAG mice. (hRN × hAG)F1 mice are known as Tsukuba Hypertensive Mice and they provide us the opportunity to understand the role of the renin-angiotensin system in hypertension.

The F1 offspring was obtained from breeding between a female carrying the human renin gene (hRN) and a male possessing the human angiotensinogen gene (hAG), both of which have mixed background of C57BL/6N and 6J. Pregnancy and weaning rate were both 90%, and the mean litter size was 4.9 in our facility.

Acknowledgements

We thank Ms. Tomoko Okano, Dr. Junji Ishida, and Dr. Fumihiko Sugiyama of University of Tsukuba for the study, collecting the data, and the analyses.